

REMARKS

Claims 1-12, 15, and 18-28 are pending. Applicants have cancelled claims 15 and 28 without prejudice to pursuing this subject matter in one or more continuing applications. Claims 1-12 and 18-27 will therefore be pending upon entry of the proposed amendments.

Interview Summary

On August 6, 2009, Applicants' representative, John T. Kendall, conducted a telephone interview with Examiner Jaisle. Applicants' representative wishes to thank the Examiner for her courtesy and helpful comments.

During the interview, the present 35 U.S.C. § 112 first and second paragraph rejections were discussed. The Examiner indicated that Applicants could cancel "mercapto," "sulfonamino," and "N,N-aminocarbonyl" to address the 35 U.S.C. § 112 second paragraph rejections based on these terms. The Examiner also indicated that Applicants could replace each occurrence of "divalent ... alkyl" with "alkylene," each occurrence of "divalent ... alkenyl" with "alkenylene," and each occurrence of "divalent ... alkynyl" with "alkynylene" to address the 35 U.S.C. § 112 second paragraph rejections based on these terms.

Finally, the Examiner indicated that any new arguments pertaining to the remaining rejections would be considered.

Claim Amendments

Claim 1

[1] As suggested by the Examiner in the above discussed telephone interview, Applicants have replaced:

- each occurrence of "divalent ... alkyl" with "alkylene;"
- each occurrence of "divalent ... heteroalkyl" with "heteroalkylene;"
- each occurrence of "divalent ... haloalkyl" with "haloalkylene;"
- each occurrence of "divalent ... alkenyl" with "alkenylene;"

- each occurrence of "divalent ... alkynyl" with "alkynylene;" and
- each occurrence of "divalent ... heteroalkynyl" with "heteroalkynylene;"

in the definitions of L and G1.

[2] As suggested by the Examiner in the above discussed telephone interview, Applicants have cancelled each occurrence of "mercapto," "sulfonamino," and "N-alkylsulfonamino" in the definition of G1.

[3] Applicants have amended each occurrence of "N,N-aminocarbonyl" in the definition of G1 to correct an obvious clerical error. Specifically, Applicants have amended each occurrence of "N,N-aminocarbonyl" to read "N,N-dialkylaminocarbonyl." Support for this amendment is discussed in more detail below.

G1 is defined over the course of five consecutive clauses in claim 1. The term "N,N-aminocarbonyl" occurs in each of the first four clauses of the definition of G1. The first of these four clauses is representative in content of the other three clauses and is reproduced below in its previously presented form for the convenience of the Office (underline, bold, and italic emphasis added and discussed in more detail below).

G¹ is a monocyclic ring structure of up to 7 ring atoms, which is selected from cycloalkyl; cycloalkenyl; heterocycloalkyl; unsaturated heterocycloalkyl; aryl; or an aromatic heterocyclic ring containing 1 to 3 heteroatoms independently selected from O, S and N; each of which is optionally substituted by one or more substituents independently selected from halogen, hydroxy, CHO, C1 to 6 alkyl, C1 to 6 alkoxy, halo-C1 to 6 alkoxy, amino, N-alkylamino, N,N-dialkylamino, alkylsulfonamino, C2 to 6 alkanoylamino, cyano, nitro, mercapto, alkylthio, alkylsulfonyl, alkylaminosulfonyl, C2 to 6 alkanoyl, aminocarbonyl, N-alkylamino-carbonyl, N,N-amino-carbonyl; wherein any alkyl radical within any substituent may itself be optionally substituted with one or more groups selected from halogen, hydroxy, C1 to 6 alkoxy, halo-C1 to 6 alkoxy, amino, N-alkylamino, N,N-dialkylamino, N-alkylsulfonamino, N-C2 to 6 alkanoylamino, cyano, nitro, mercapto, alkylthio, alkylsulfonyl, N-alkylaminosulfonyl, CHO, C2 to 6 alkanoyl, aminocarbonyl, N-alkylaminocarbonyl, and N,N-dialkylaminocarbonyl; and wherein any alkyl radical is a C1 to 6 alkyl radical; or ...

Each of the first four clauses in the definition of G1 contains two listings of substituents (these are underlined in the above quoted clause from G1). Within each of these listings are series of amino and amino-containing substituents that are ascending with respect to the number of alkyl groups that are attached to the amino substituent or amino portion of the substituent (these series of substituents are highlighted with bold emphasis in the above quoted clause from

G1; the series that recites "N,N-aminocarbonyl" is also further highlighted with italic emphasis in the above quoted clause from G1).

As can be seen, the term "N,N-aminocarbonyl" occurs at the end of the following series of substituents: "aminocarbonyl, N-alkylamino-carbonyl, N,N-amino-carbonyl". As pointed out by the Office, "[t]he nomenclature 'N,N-' usually precedes the definition of substituents on an amino group," (Office Action, page 11). Accordingly, the skilled artisan would recognize that "N,N-aminocarbonyl" should have been written as "N,N-dialkylaminocarbonyl" because "N,N-aminocarbonyl" occurs at the end of a series of aminocarbonyl substituents that is ascending with respect to the number of alkyl groups that are attached to amino portion of the aminocarbonyl substituent. This is also evident from the preceding alkyl-ascending series "amino, N-alkylamino, N,N-dialkylamino" (emphasis added) and certainly also evident from the later recited alkyl-ascending, aminocarbonyl series "aminocarbonyl, N-alkylamino-carbonyl, N,N-dialkylamino-carbonyl" (emphasis added).

Applicants have therefore corrected this obvious error with the appropriate correction throughout the definition of G1.

Claims 7, 10, 18, and 24

Each of these claims have been amended to be consistent with claim 1 as presently amended.

The foregoing amendments, which introduce no new matter, are being made for the sole purpose of expediting prosecution of the present application; and Applicants expressly reserve the right to pursue any cancelled subject matter in one or more continuing applications.

Rejections under 35 U.S.C. § 112, first paragraph

Written Description

Claims 1-8, 10, 15, 18, 19-24, and 26-28 are rejected for allegedly failing to comply with the written description requirement of 35 U.S.C. § 112, first paragraph. The recitation of "mercapto" appears to be the basis for the rejection. Applicants respectfully disagree with the grounds for the rejection; however, to expedite prosecution of the present application, Applicants have cancelled each occurrence of "mercapto" in claim 1 as suggested by the Examiner.

Enablement

Claims 15 and 28 are rejected for allegedly failing to comply with the enablement requirement of 35 U.S.C. § 112, first paragraph. Applicants respectfully disagree with the grounds for the rejection; however, to expedite prosecution of the present application, Applicants have cancelled claims 15 and 28, thus rendering the rejection moot.

Rejections under 35 U.S.C. § 112, second paragraph

Claims 1-8, 10-12, and 15-17 are rejected on various grounds under 35 U.S.C. § 112, second paragraph for allegedly being indefinite. The recitation of "divalent," "sulfonamino," "N,N-amino-carbonyl," "bicyclic," "tricyclic," and "tetracyclic" appear to be the basis for these rejections.

[A] "divalent"

Applicants respectfully disagree with the grounds for the rejection; however, to expedite prosecution of the present application, Applicants have replaced:

- each occurrence of "divalent ... alkyl" with "alkylene;"
- each occurrence of "divalent ... heteroalkyl" with "heteroalkylene;"
- each occurrence of "divalent ... haloalkyl" with "haloalkylene;"
- each occurrence of "divalent ... alkenyl" with "alkenylene;"
- each occurrence of "divalent ... alkynyl" with "alkynylene;" and

- each occurrence of "divalent ... heteroalkynyl" with "heteroalkynylene;"

in the definitions of L and G1 as suggested by the Examiner in the above-discussed telephone interview. In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection.

[B] "sulfonamino,"

Applicants respectfully disagree with the grounds for the rejection; however, to expedite prosecution of the present application, Applicants have cancelled each occurrence of "sulfonamino" and "N-alkylsulfonamino" in the definition of G1 as suggested by the Examiner in the above-discussed telephone interview. In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection.

[C] "N,N-amino-carbonyl,"

Applicants have amended each occurrence of "N,N-aminocarbonyl" in the definition of G1 to correct an obvious clerical error. Specifically, Applicants have amended each occurrence of "N,N-aminocarbonyl" to read "N,N-dialkylaminocarbonyl." Applicants respectfully request reconsideration and withdrawal of the rejection in view of this amendment and accompanying remarks above.

[D] "bicyclic," "tricyclic," and "tetracyclic"

According to the Office, Applicants' recitation of these terms "distorts the accepted chemical meaning of bicyclic, tricyclic or tetracyclic" (Office Action, page 12).

This is respectfully traversed.

[1] According to the MPEP (MPEP §§ 2173, 2173.01, 2173.02, emphasis added):

The primary purpose of this requirement of definiteness of claim language is to ensure that the scope of the claims is clear so the public is informed of the boundaries of what constitutes infringement of the patent.

A fundamental principle contained in 35 U.S.C. 112, second paragraph is that applicants are their own lexicographers. They can define in the claims what they regard as their invention essentially in whatever terms they choose so long as **>any special meaning assigned to a term is clearly set forth in the specification. See MPEP § 2111.01.< Applicant may use functional language, alternative expressions, negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought. As noted by the court in *In re Swinehart*, 439 F.2d 210, 160 USPQ 226 (CCPA 1971), a claim may not be rejected solely because of the type of language used to define the subject matter for which patent protection is sought. ...

The examiner's focus during examination of claims for compliance with the requirement for definiteness of 35 U.S.C. 112, second paragraph, is whether the claim meets the threshold requirements of clarity and precision, not whether more suitable language or modes of expression are available. When the examiner is satisfied that patentable subject matter is disclosed, and it is apparent to the examiner that the claims are directed to such patentable subject matter, he or she should allow claims which define the patentable subject matter with a reasonable degree of particularity and distinctness.

[2] The specification clearly defines what ring structures are encompassed by the terms "bicyclic," "tricyclic," and "tetracyclic." See, e.g., page 7, lines 11-15 (emphasis added):

and when G¹ is a bicyclic, tricyclic or tetracyclic group, each ring structure is independently joined to the next ring structure by a direct bond, by -O-, by C1-6 alkyl, by C1-6 haloalkyl, by C1-6 heteroalkyl, by C2-6 alkenyl, by C2-6 alkynyl, by sulfone, by CO, by NR⁷CO, by CONR⁷, by NR⁷, by S, or by C(OH), or each ring structure is fused to the next ring structure;

[3] The Applicant is permitted to be his or her own lexicographer, and the present application clearly defines what Applicants intended terms such as "bicyclic" to mean (*supra*). Using "bicyclic" as an example, the skilled artisan would understand this term to mean a ring structure having 2 rings *in toto*, the two rings either (i) being joined by a bond, an atom, or a group of atoms (i.e., one ring atom in each of the two rings serving as a connection point for the

joinder bond, atom, or group of atoms); or **(ii)** being fused to one another. See also the specification, e.g., at page 9, lines 15-25 and page 14, lines 4-8.

As such, the skilled artisan reading the present claims in conjunction with the specification would understand which ring structures are encompassed by the definition of G¹, and which are not and hence would be able to ascertain the metes and bounds of the present claims. Applicants submit that the present claims meet at least the threshold requirements of clarity and precision and respectfully request reconsideration and withdrawal of the rejection.

CONCLUDING FORMALITIES

The fee in the amount of \$1,110 for the three month extension of time is being paid concurrently herewith on the Electronic Filing System (EFS) by way of a Deposit Account authorization. Please apply any other charges or credits to deposit account 06-1050, referencing Attorney Docket No. 06275-522US1/101414-1P US.

Respectfully submitted,

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